

What is claimed is:

1. A process for removing a NMMO-water mixture collecting in the interior of a tubular film produced by the N-methylmorpholine N-oxide (NMMO) process which
5 comprises passing a tubular film, after exit from a spinning vat, over a path upward at an incline to a wash vat and NMMO-water mixture situated in the tubular film interior flows back via the inclined path into a part of the tubular film which is descending vertically in the spinning vat and from there the NMMO-water mixture is sucked out of the tubular film.
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2. The process as claimed in claim 1, wherein, to compact the tubular film wall and for accelerated depletion of the NMMO-water mixture in the tubular film, the tubular film is treated with hot wash liquid at from about 60 °C. to about 80 °C.
- 15 3. The process as claimed in claim 2, wherein the treatment with hot wash liquid is performed along the inclined path.
4. The process as claimed in claim 3, wherein the tubular film is sprayed with the hot wash liquid along the inclined path.
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5. The process as claimed in claim 2, wherein the wash liquid is water.
6. The process as claimed in claim 1, wherein the tubular film is continuously passed from the spinning vat upward to the wash vat across the inclined path at an
25 angle of from about 10° to about 60° to the horizontal.
7. The process as claimed in claim 1, wherein the tubular film is passed over an

ascending serpentine-like path from the spinning vat to the wash vat.

8. The process as claimed in claim 1, wherein the inclination of the path is adjustable.

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9. The process as claimed in claim 1, wherein NMMO-water mixture situated in the tubular film wall and in the tubular film interior is squeezed out along the inclined path.

10 10. The process as claimed in claim 9, wherein the NMMO-water mixture situated in the tubular film wall and in the tubular film interior is squeezed out in the running direction of the tubular film at the same speed as the conveyor belt moves.

11. The process as claimed in claim 9, wherein the NMMO-water mixture is
15 squeezed out along the entire path at a plurality of sites or only at the higher end of the path.

12. An apparatus for removing a NMMO-water mixture collecting in the interior of a tubular film produced by the N-methylmorpholine N-oxide (NMMO) process, in
20 which at least one conveyor belt which circulates endlessly over two rollers is disposed between a spinning vat and a wash vat and is directed upward at an incline toward the wash vat, and the tubular film which runs vertically downward in the interior of the spinning vat and, after its reversal, runs vertically upward, is passed over the inclined conveyor belt toward the wash vat.

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13. The apparatus as claimed in claim 12, wherein a plurality of conveyor belts are disposed between the spinning vat and the wash vat, each conveyor belt circulates

endlessly over two rollers and the conveyor belts are oriented in a zigzag shape one above the other.

14. The apparatus as claimed in claim 13, wherein a reversal roller is present
5 between in each case two conveyor belts and the tubular film is passed from the spinning vat in a serpentine-like manner over the top runs of the conveyor belts and the reversal rollers to the wash vat.

15. The apparatus as claimed in claim 12, wherein a spray device having a
10 number of spraying nozzles for spraying the tubular film with wash liquid is disposed above the conveyor belt.

16. The apparatus as claimed in claim 13, wherein in each case one spray device
15 having a number of spraying nozzles is mounted above one, or two or all conveyor belts.

17. The apparatus as claimed in claim 12, wherein a pinch-roll pair is disposed
near the top end of the conveyor belt, the tubular film passes through between the pinch-roll pair and the pinch-roll pair circulates in the opposite direction to the
20 transport direction of the tubular film.

18. The apparatus as claimed in claim 13, wherein a pinch-roll pair is disposed
near the top end of the central or top conveyor belt, the tubular film runs through between the pinch-roll pair and the pinch-roll pair circulates in the opposite direction
25 to the transport direction of the tubular film.

19. The apparatus as claimed in claim 12, wherein a plurality of pinch rolls lie

against the surface of the tubular film which is transported over the conveyor belt, and the pinch-rolls are mounted with their axles so as to be able to rotate in two circulating chains and circulate in the opposite direction to the transport direction of the tubular film at a variable speed.

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20. The apparatus as claimed in claim 12, wherein the conveyor belt and the spray device are adjustable vertically in a manner such that their angle of inclination to the horizontal is from about 10° to about 60° .

10 21. The apparatus as claimed in claim 12, wherein the circulation speed of the pinch-roll pairs is variable.

22. The apparatus as claimed in claim 12, wherein the conveyor belts are equipped with breakthroughs.

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23. A process for removing a liquid collecting in an interior part of a tubular film which comprises passing a tubular film having an interior part along a vertically descending path through a liquid in a spinning vat, and then removing the tubular film from the spinning vat along a vertically ascending path through the liquid in the spinning vat, and then passing the tubular film over an upwardly inclined path toward a wash vat such that liquid in the interior part of the tubular film flows back via the inclined path into a part of the interior of the tubular film which is in the vertically descending path in the spinning vat, and sucking liquid out of the part of the interior of the tubular film which is in the vertically descending path.

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24. The process of claim 23 wherein the tubular film is sprayed with hot water at from about 60°C. to about 80°C. along the upwardly inclined path.

25. The process of claim 23, wherein the upwardly inclined path comprises and ascending serpentine-like path from the spinning vat to the wash vat.

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